

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A stretch of rail comprising a railway switch element made from high-alloy steel, in which at least one alloy element has a content equal to at least 5% by weight, and a length of rail made from medium-alloy steel, directly ~~connected~~ welded to one another by a weld without deposition of metal, wherein the length of rail is formed from a medium-alloy low-carbon steel in which the carbon content is less than 0.55% by weight and which is a bainitic steel.

2. (previously presented) The stretch of rail as claimed in Claim 1, wherein the length of rail is formed from a medium-alloy low-carbon steel in which the carbon content is less than 0.5% by weight.

3. (cancelled)

4. (previously presented) The stretch of rail as claimed in Claim 1, wherein the bainitic medium-alloy low-carbon steel is without carbide.

5. (previously presented) The stretch of rail as claimed in claim 1, wherein the medium-alloy low-carbon steel forming the length of rail has the following composition by weight:

0.05% to 0.50% of carbon;
0.5% to 2.5% of manganese;
0.6% to 3% of silicon or aluminium;
0.25% to 3.1% of chromium; and
0% to 0.9% of molybdenum.

6. (previously presented) The stretch of rail as claimed in Claim 5, wherein the medium-alloy low-carbon steel forming the length of rail has a composition defined below:

0.28% to 0.36% of carbon;
1.40% to 1.70% of manganese;
at most 0.03% of phosphorus;
0.01% to 0.03% of sulphur;
at most 0.005% of aluminium;
1% to 1.40% of silicon;
0.40% to 0.60% of chromium;
0.08% to 0.20% of molybdenum;
at most 0.04% of titanium; and
at most 0.004% of boron.

7. **(previously presented)** The stretch of rail as claimed in claim 1, wherein the railway switch element made from high-alloy steel comprises 12% to 14% by weight of manganese.

8. **(previously presented)** The stretch of rail as claimed in claim 1, wherein the railway switch element and the length of rail are welded by flash welding and forging.

9. **(previously presented)** The stretch of rail as claimed in claim 1, wherein there is no heat treatment after the welding of the railway switch element and the length of rail.

10. **(previously presented)** The stretch of rail as claimed in claim 1, wherein the switch element made from the high-alloy steel has a hardness between 170 and 230 HB.

11. **(previously presented)** The stretch of rail as claimed in claim 6, wherein the medium-alloy low-carbon steel has a hardness between 350 and 390 HB.

12. (previously presented) A stretch of rail comprising:

a railway switch element made from high-alloy steel, in which at least one alloy element has a content equal to at least 5% by weight, and

a length of rail made from medium-alloy steel, directly connected to the railway switch element by a weld without deposition of metal, wherein the length of rail made of medium-alloy steel consists essentially of a medium-alloy low-carbon steel in which the carbon content is less than 0.55% by weight and said medium-alloy low-carbon steel is bainitic.

13. (previously presented) The stretch of rail as claimed in claim 12, wherein the bainitic medium-alloy low-carbon steel forming the length of rail has the following composition by weight:

0.05% to 0.50% of carbon;

0.5% to 2.5% of manganese;

0.6% to 3% of silicon or aluminium;

0.25% to 3.1% of chromium; and

0% to 0.9% of molybdenum.

14. (previously presented) The stretch of rail as claimed in Claim 12, wherein the bainitic medium-alloy low-carbon steel forming the length of rail has a composition defined below:

0.28% to 0.36% of carbon;
1.40% to 1.70% of manganese;
at most 0.03% of phosphorus;
0.01% to 0.03% of sulphur;
at most 0.005% of aluminium;
1% to 1.40% of silicon;
0.40% to 0.60% of chromium;
0.08% to 0.20% of molybdenum;
at most 0.04% of titanium; and
at most 0.004% of boron.

15. (new) A stretch of rail, comprising:

a railway switch element made from high-alloy steel, in which at least one alloy element has a content equal to at least 5% by weight; and

a length of rail made from medium-alloy steel, the railway switch element and the length of rail being directly welded to one another by a weld without deposition of metal, wherein the length of rail is formed from a medium-alloy low-carbon steel in which a carbon content is less than 0.55% by weight and which is a carbide-free bainitic steel.

16. (new) The stretch of rail as claimed in claim 15, wherein the carbide-free bainitic medium-alloy low-carbon steel forming the length of rail has a following composition by weight:

0.05% to 0.50% of carbon;
0.5% to 2.5% of manganese;
0.6% to 3% of silicon or aluminium;
0.25% to 3.1% of chromium; and
0% to 0.9% of molybdenum.

17. (new) The stretch of rail as claimed in claim 15, wherein the carbide-free bainitic medium-alloy low-carbon steel forming the length of rail has a composition defined below:

0.28% to 0.36% of carbon;
1.40% to 1.70% of manganese;
at most 0.03% of phosphorus;
0.01% to 0.03% of sulphur;
at most 0.005% of aluminium;
1% to 1.40% of silicon;
0.40% to 0.60% of chromium;
0.08% to 0.20% of molybdenum;
at most 0.04% of titanium; and
at most 0.004% of boron.